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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,333	03/06/2002	Imed Gharsalli	01-484	9000
719	7590	04/18/2006	EXAMINER	
CATERPILLAR INC. 100 N.E. ADAMS STREET PATENT DEPT. PEORIA, IL 616296490			NGUYEN, KIMNHUNG T	
			ART UNIT	PAPER NUMBER
			2629	

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/092,333	GHARSALLI ET AL
	Examiner	Art Unit
	Kimnhung Nguyen	2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on RCE and Amendment filed on 12/12/05.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) _____ is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/12/05 has been entered.

2. This application has been examined. The claims 1-20 are pending. The examination results are as following.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-15 and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Brandt et al. (US 6,854,554).

As to claim 1, Brandt et al. discloses in fig. 2, a method for controlling a parameter of at least one signal, including the steps of receiving a desired command signal (see signal of joystick 102); from at least one control input;

determining a potential condition for receiving an undesired command signal (see signal of joystick 104) from at least one other control input; adjusting a parameter of an undesired command signal (see col. 5, lines 52-58) received from the at least one other control input in response to the potential condition, and delivering the desired command signal and the undesired command signal to at least one output (see col. 4, lines 27-38).

As to claim 2, Brandt et al. discloses further, wherein receiving a desired command signal (102) includes the step of receiving a desired command signal from at least one axis of a joystick (because joystick 102 having at least one axis).

As to claim 3, Brandt discloses further, wherein receiving a desired command signal includes the step of receiving a desired command signal from at least one lever (because joystick 104 having at least one level).

As to claim 4, Brandt et al. discloses further, wherein receiving a desired command signal (102) includes the step of receiving a desired command signal from an automated program (see col. 4, lines 28-37).

As to claim 5, Brandt et al. discloses further, wherein receiving a desired command signal includes the step of receiving a desired command signal from a proportional output device (see col. 3, lines 1-23, col. 5, lines 15-21 and col. 6, lines 24-42).

As to claim 6, Brandt et al. discloses further, wherein adjusting a parameter of an undesired command signal includes the step of increasing an amount of deadband of the at least one other control input (see col. 6, lines 14-42).

As to claim 7, Brandt et al. discloses further, wherein adjusting a parameter of an undesired command signal includes the step of adjusting a gain parameter of the at least one other control input (see col. 6, lines 14-42).

As to claim 8, Brandt et al. discloses in fig. 2, an apparatus for controlling a parameter of at least one signal, comprising;

a plurality of control inputs (102, 104); and
a controller for (116):

receiving a first command signal from at least one control input (102);
determining a potential condition for receiving an undesired command (104)
signal from at least one other control input;

receiving a second command signal from the at least one other input,
modifying a parameter of the second command signal in response to the potential condition
(col.5, lines 52-58), and

delivering the first and second command signals to at least one output (col. 4, lines
27).

As to claim 9, Brandt et al. discloses further, wherein the plurality of

control inputs includes a joystick (as discussed above).

As to claim 10, Brandt et al. discloses further, wherein the joystick includes a plurality of axes, each axis providing an associated control input (because the joystick 102, or 104 can rotate with multiple axes).

As to claim 11, Brandt et al. discloses further, wherein the plurality of control inputs includes at least one lever (as discussed above).

As to claim 12, Brandt et al. discloses further, wherein the plurality of control inputs includes at least one automated program for initiating a command signal (see col. 4, lines 28-32).

As to claim 13, Brandt et al. discloses further, wherein the plurality of control inputs includes at least one proportional output device (see col. 3, lines 1-23, col. 5, lines 15-21).

As to claim 14, Brandt et al. discloses further, wherein the plurality of control inputs includes at least one of a joystick, a lever and an automated program (as discussed above).

As to claim 15, Brandt et al. discloses in fig. 2, further wherein the controller (116) includes an input/output control interface (see left and right joysticks 102, 104, and actuators

114); and at least one of a deadband control function and a gain control function (see col. 6, lines 14-42).

As to claim 17, Brandt et al. discloses further in fig. 2, wherein:

the desired command signal (102) is indicative of an intentional actuation of the at least one control input;

and determining a potential condition for receiving an undesired command signal from at least one other control input includes determining the undesired command signal to be indicative of an inadvertent actuation of the at least one other control input (see col. 4, lines 42-50).

As to claim 18, Brandt et al. discloses further, a method for delivering a command signal comprising:

receiving a first command signal (102) from a first control input;

receiving a second command signal (104) from a second control input;

selectively passing the second command signal through a control function to selectively control a parameter of the second command signal as a function of the first command signal;

subsequently removing the control function from the second command signal, and

communicating the first and second command signals to at least one output as discussed in claim 8.

As to claim 19, Brant et al. discloses further,

selectively passing the second command signal through the control function (116) when the second command signal (104) is determined to be an inadvertent signal with respect to the first command signal, and wherein the control function is configured to control a parameter of the second command signal (see col. 5, lines 52-67).

As to claim 20 is similar claims 8 and 18 and discussed above.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt et al. (US 6,854,554) in view of Kim (US 2003/0060906).

Brandt et al. discloses a method for controlling a parameter of at least one signal, including the steps of:

receiving a desired command signal (see signal of joystick 102); from at least one control input;

determining a potential condition for receiving an undesired command signal (see signal of joystick 104) from at least one other control input; and including removing the adjusted from the undesired command (see col. 5, lines 52-58).

Brandt et al. does not express the undesired command signal after an elapsed period of time.

However, Kim discloses the undesired command signal after an elapsed period of time (see 0002).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the undesired command signal after an elapsed period of time as taught by Kim into the system of Brantd et al. because this would provide a slight elapse of time between the operation of the levels, and the elapse in time prevents a smooth and substantially simultaneous operation of the vehicle actuators (see 0002).

Response to Arguments

7. Applicant's arguments with respect to claims 1-20 filed on 12/12/05 have been considered but are moot in view of the new ground(s) of rejection.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimnhung Nguyen
Kimnhung Nguyen

Examiner
April 16, 2006